

Terry Tyler Martinez

Personal Data

Address: 240 Lakeview Acres Road
Collinsville, Illinois 62234

Place of Birth: Linton, Indiana

Education

The University of British Columbia, Vancouver, British Columbia Canada	1973-1977
Ph.D. Pharmacology	1977
Department of Pharmacology, Faculty of Medicine	
Thesis Title: The Antiarrhythmic Actions of Prostaglandins	
M.Sc. Pharmacology	1975
Thesis Title: The Effects of Adrenergic Amines and Theophylline on Contractile Force and Cyclic AMP	
Purdue University, Lafayette, Indiana	1964-70
M.Sc. Hospital Pharmacy	1970
B.Sc. Pharmacy	1969
Distinguished Student Award	

Professional Employment

Toxicologist and Pharmacologist - Consultant	1993-2005
Toxicologic Associates Inc., St. Louis, Missouri	
Associate Professor of Pharmacology, Graduate Program in Nursing,	2005
Southern Illinois University, Edwardsville, Illinois	
Lecturer in Pharmacology, School of Dental Medicine,	
Southern Illinois University, Alton, Illinois	
Associate Professor of Toxicology, Pathology, and Pharmacology (Tenured)	1982-2003
Saint Louis College of Pharmacy, St. Louis, Missouri	
Poison Specialist	1984-1992
Cardinal Glennon Hospital, Regional Poison Control Center,	
Saint Louis, Missouri	

Research Fellowship, Naval Medical Research Naval Medical Research Institute, Department of Diving Physiology, Bethesda Maryland	1981-1982
Poison Specialist Rhode Island Regional Poison Control Center, Rhode Island Hospital, Providence, Rhode Island	1981-1982
Assistant Professor of Pharmacology and Toxicology School of Pharmacy, Northeast Louisiana University, Monroe, Louisiana	1979-1981
Assistant Professor of Pharmacology and Toxicology, School of Pharmacy and School of Medicine, Creighton University, Omaha, Nebraska	1977-1979
Graduate Student, Canadian Heart Foundation Student and Lecturer Department of Pharmacology, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada	1973-1977

Research Interests

1. Identification and description of drug and hormone receptors.
2. Properties and modes of action of toxins.
3. Evaluation of antidysrhythmic agents.
4. Properties and mode of action of prostaglandins.
5. Identification and properties of endogenous cardiotonic steroids.
6. Mechanisms of alcohol and drug abuse.
7. Evaluation and mechanisms of herbal medicine

Papers Published

Martinez TT and Martinez RR, Failure of standardized psychophysical tests for DWI to distinguish between blood alcohol levels of 0.000 to 0.125 g/dL, Proc. West. Pharmacol. Soc., 46:170, 2003.

Martinez TT and Martinez RR, The effect of chronic ginseng in three doses. Planta Medica (Submitted for publication) 2004.

Martinez TT and Martinez RR, Medicinal herbs from the Caribbean National Forest (El Yunque), Puerto Rico, Proc. West. Pharmacol. Soc. 45:20, 2002.

Martinez TT and Martinez RR, Comparison of breath and blood ethanol measurements in human subjects with obstructive pulmonary disease, Proc. West. Pharmacol. Soc. 45:23, 2002.

Martinez TT and Martinez RR. The effect of first and second beer consumption on breathalyzer results. Proc. West. Pharmacol. Soc. 43:79, 2000.

Rickert K, Martinez RR and Martinez TT. Pharmacist knowledge of common herbal preparations, Proc. West. Pharmacol. Soc. 42:1, 1999.

Martinez TT and Martinez RR. The effect of an inhalation aerosol bronchodilator on breathalyzer results in drinking and non-drinking subjects, Proc. West. Pharmacol. Soc. 41:51, 1998.

Schmidt C, Gossage B, Grinowski A and Martinez TT. Investigation of the postmortem redistribution of opiates. Proc. West Pharmacol. Soc. 39:27, 1996.

Martinez TT and Long C. The dermal toxicity of industrial metal working lubricants. Proc. West. Pharmacol. Soc. 38:96, 1995.

Martinez TT and Long C. Explosion risk from swimming pool chlorinators and review of chlorine toxicity. Journal of Toxicology - Clinical Toxicology 33: 349, 1995.

Luthy S and Martinez TT. Comparison of the effect of isoquinoline analogs and propranolol on voluntary ethanol ingestion. Proc. West. Pharmacol. Soc. 35:29, 1992.

Brown K and Martinez TT. Increase in arrhythmias associated with neuroleptic agents in response to sympathomimetic and hypoxic challenge. Proc. West. Pharmacol. Soc. 34:117, 1991.

Naeger, S and Martinez TT. The effect of an isoquinoline analogue on voluntary ethanol ingestion in rat. Proc. West. Pharmacol. Soc. 34:35, 1991.

Martinez TT and Brown K. Oral and pulmonary toxicology of the surfactant used in Roundup herbicide. Proc. West. Pharmacol. Soc. 34:43, 1991.

Woods A and Martinez TT. Comparison of the cardiotonic response of ouabain, androstane-3-one, 15-dihydroprogesterone, and conjugated estrogens. Proc. West. Pharmacol. Soc. 34:113, 1991.

Stout D, Long C and Martinez TT. Characterization of cardiotonic steroids from uterine tissue and amniotic fluid. Proc. West. Pharmacol. Soc. 33:133, 1990.

Naeger S and Martinez TT. The effect of tetrahydropapaveroline, bromocriptine, haloperidol, and lithium on voluntary ethanol ingestion. Proc. West. Pharmacol. Soc. 33:205, 1990.

Martinez TT, Long C and Hiller R. Comparison of the toxicology of the herbicide, Roundup, by oral and pulmonary routes of exposure. Proc. West. Pharmacol. Soc. 33:193, 1990.

Katsiyannis WT, Long CL and Martinez TT. Cardiotonic steroids extracted from rabbit uterine tissue and amnionic fluid. Proc. West. Pharmacol. Soc. 32:19, 1989.

Williamson LM and Martinez TT. Toxic effect of different viscosity hydrocarbons in the lung. Proc. West. Pharmacol. Soc. 32:313, 1989.

Barker E and Martinez TT. Comparison of the effect of common decongestant agents and amphetamine on fighting behavior and weight change. Proc. West. Pharmacol. Soc. 31:281, 1988.

Oster L and Martinez TT. The effect of tetrahydropapveroline and naltrexone on voluntary ethanol ingestion in rats. Proc. West. Pharmacol. Soc. 31:277 1988.

Martinez TT, Jerome ME, Barry R, Jaeger R and Xander JG. The removal of cactus spines from the skin: A comparative evaluation of several methods. Am. J. of Dis. of Child 141:1291, 1987. (Cited in Poisindex)

Jessen TG and Martinez TT. The effect of phenylpropanolamine and amphetamine on fighting behavior and weight change in mice. Proc. West. Pharmacol. Soc. 30:419, 1987.

Xander JG and Martinez TT. A comparison of the effect of cholera toxin and norepinephrine on contractile and cyclic nucleotide response in the heart. Proc. West. Pharmacol. Soc. 30:277, 1987.

Martinez TT. Cholera Toxin-induced negative chronotropic and positive cyclic-AMP response in cardiac myocytes. Proc. West. Pharmacol. Soc. 29:35, 1986.

Martinez TT, Jaeger RW, deCastro FJ, Thompson MW and Hamilton MF. A comparison of the absorption and metabolism of isopropyl alcohol by oral, dermal, and inhalation routes. Veterinary and Human Toxicology 28:233, 1986. (Cited in Poisindex)

Martinez TT and Crampton JM. Prostaglandins show marked differences when tested against early ischemic dysrhythmias in rat. Life Sciences 29:1449, 1981.

Collins, GA, Johnston KM, Martinez TT and Walker MJA: Prostaglandins have limited actions in abnormalities of beating induced in cultured heart cells. Prostaglandins 18:591, 1979.

Martinez TT, Collins GA and Walker MJA. The effects of prostaglandins on the beating activity of cultured heart cells. Prostaglandins 14:449, 1977.

Martinez TT and Walker MJA. The actions of ouabain, dinitrophenol, anoxia, and ionic manipulation on cultured heart cells. Proc. West. Pharmacol. Soc. 20:269, 1977.

Walker MJA, Martinez TT and Godin DV. Investigations into the cardiotoxicity of a toxin from the nematocysts of the jellyfish, *Cyanea Capillata*. Toxicon 15:339, 1977

Martinez TT and McNeill JH. The effect of temperature changes on cardiac adrenergic receptors. J. Pharmacol. Exp. Ther. 203:457, 1977.

Martinez TT and McNeill JH. Cyclic AMP and the positive inotropic effect of norepinephrine and phenylephrine. Can. J. Physiol. Pharmacol. 55:279, 1977.

Martinez TT and McNeill JH. The effect of theophylline on amine-induced cardiac cyclic AMP and contractile force. Can. J. Physiol. Pharmacol. 55:98, 1977.

Martinez TT and McNeill JH. Acetaminophen - A review. Can. Pharm. J. 107:26, 1974.

Abstracts of Papers Presented at National and International Meetings:

Martinez, TT, and Martinez RR, Welding Fumes, Manganese Toxicity, & Parkinsonism, Forty-Eighth Annual Meeting of the Western Pharmacology Society, San Diego, California, February 2005.

Martinez. TT, and Martinez RR, Phytomedicinal Compounds in Caribbean Mangrove Plants, American Society of Plant Biologists, Orlando, Florida, No 15 July 2004

Martinez TT, Martinez SI, and Martinez RR, Biological assay of five native plants used as medicine in Hawaii, Forty-Sixth Annual Meeting of the Western Pharmacology Society, Lake Tahoe, California, February 2003.

Martinez TT and Martinez RR, Failure of standardized psychological tests for DWI to distinguish between blood alcohol levels of 0.000 to 0.125 g/dL, Forty-Sixth Annual Meeting of the Western Pharmacology Society, Lake Tahoe, California, February 2003

Martinez TT and Martinez RR, Medicinal herbs from the Caribbean National Forest (El Yunque), Puerto Rico, Forty-Fifth Annual Meeting of the Western Pharmacology Society, Mazatlan, Sinaloa, Mexico January 2002.

Martinez TT and Martinez RR, Comparison of breath and blood ethanol measurements in human subjects with obstructive pulmonary disease, Forty-Fifth Annual Meeting of the Western Pharmacology Society, Mazatlan, Sinola, Mexico January 2002.

Martinez TT and Martinez RR, The effect of chronic ginseng in three doses. Forty-Fourth Annual Meeting of the Western Pharmacology Society, Vancouver, Canada, March 2001.

Martinez TT the effect of inhalation and dermal exposure to gammabutyrolactone in mice. Forty-Third Annual Meeting of the Western Pharmacology Society, Westward Look Resort, Tucson, Arizona, January 2000.

Martinez TT and Martinez RR. The effect of first and second beer consumption on breathalyzer results. Forty-Third Annual Meeting of the Western Pharmacology Society, Westward Look Resort, Tucson, Arizona, January 2000.

Martinez TT. Epoxy resins and polyamine dermal and systemic toxicity. Thirty-Eighth Annual Meeting of the Society of Toxicology, A 394, Morial Convention Center, New Orleans, Louisiana, March 1999.

Rickert K, Martinez RR and Martinez TT. Pharmacist knowledge of common herbal preparations. Forty-Second Annual Meeting of the Western Pharmacology Society, Makena Resort, Maui, Hawaii, January 1999.

Martinez TT. Dermal and systemic toxicity of epoxy resins and polyamines. Nineteenth Annual Meeting of the American College of Toxicology, p-9, Grosvenor Resort, Lake Buena Vista, Florida, November 1999.

Martinez TT and Johnson B. Pyrethrin ocular toxicity. Experimental Biology 98, Moscone Convention Center, San Francisco, California, April 1999.

Martinez TT and Johnson B. Ocular toxicity of a pyrethrin flea dip. Joint Meeting, Forty-First Annual Meeting of the Western Pharmacology Society and XXI Congreso Nacional de Farmacología, El Cid Mega Resort, Mazatlan, Sinaloa, Mexico, January 1998.

Gossage B, Schmidt C and Martinez TT. Antagonizing Erythromycin Induced Dynamic Ileus. Thirty-Ninth Annual Meeting of the Western Pharmacology Society, Tahoe City, California, January 1996.

Schmidt C, Gossage B, Grinowski A and Martinez TT. Investigation of the postmortem redistribution of opiates. Thirty-Ninth Annual Meeting of the Western Pharmacology Society, Tahoe City, California, January 1996.

Martinez TT, Sonsini R, Gossage B and Schmidt C. Pharmacologic agents capable of relieving erythromycin induced contracture of the ileum. Sixteenth Annual Meeting of the American College of Toxicology, Vienna, Virginia, November 1995.

Martinez TT and Long C. The dermal toxicity of industrial metal working lubricants. Thirty-Eighth Annual Meeting of the Western Pharmacology Society, Wailea, Maui, Hawaii, January 1995.

Long C, Martinez TT, Revell L, and Layloff T. Toxicity of contaminants found in commercial chlorhexidine formulations. Fifteenth Annual Meeting of the American College of Toxicology, Williamsburg, Virginia, October 1994.

Luthy S and Martinez TT. Comparison of the effect of isoquinoline analogs and propranolol on voluntary ethanol ingestion. Thirty-Fifth Annual Meeting of the Western Pharmacology Society, Pacific Grove, California, January 1992.

Long C, Martinez TT, Revelle L, Layloff T, and Reed P. Comparison of the toxicity of contaminants found in commercial chlorhexidine formulations. Thirty-Fifth Annual Meeting of the Western Pharmacology Society, Pacific Grove, California, January 1992.

Reed P, Long C, and Martinez TT. Inhalation toxicity and explosion risk from solid swimming pool chlorinators. Thirty-Fifth Annual Meeting of the Western Pharmacology Society, Pacific Grove, California, January 1992.

Martinez TT. Comparison of the toxicology of the surfactant and glyosate in Roundup herbicide by oral and pulmonary route of exposure. Twelfth Annual Meeting of the American College of Toxicology, Savannah, Georgia, October 1991.

Martinez TT. Evaluation of gas, heat, and reaction rate from mixing swimming pool chlorinators. Twelfth Annual Meeting of the American College of Toxicology, Savannah, Georgia, October 1991.

Brown K and Martinez TT. Increase in arrhythmias associated with neuroleptic agents in response to sympathomimetic and hypoxic challenge. Thirty-Fourth Annual Meeting of the Western Pharmacology Society, Acapulco, Mexico, January 1991.

Naeger S and Martinez TT. The effect of an isoquinoline analogue on voluntary ethanol ingestion in rat. Thirty-Fourth Annual Meeting of the Western Pharmacology Society, Acapulco, Mexico, January 1991.

Brown K and Martinez TT. Oral and pulmonary toxicology of the surfactant used in Roundup herbicide. Thirty-Fourth Annual Meeting of the Western Pharmacology Society, Acapulco, Mexico, January 1991.

Woods A and Martinez TT. Comparison of the cardiotonic response of ouabain, androstane-3-one, 16-dihydroprogesterone, and conjugated estrogens. Thirty-Fourth Annual Meeting of the Western Pharmacology Society, Acapulco, Mexico, January 1991.

Stout D, Long C and Martinez TT. Characterization of cardiotonic steroids from uterine tissue and amniotic fluid. Thirty-Third Annual Meeting of the Western Pharmacology Society, Banff, Alberta, Canada, February 1990.

Naeger S and Martinez TT. The effect of tetrahydropapaveroline, bromocriptine, haloperidol, and lithium on voluntary ethanol ingestion. Thirty-Third Annual Meeting of the Western Pharmacology Society, Banff, Alberta, Canada, February 1990.

Hiller R, Long C and Martinez TT. Comparison of the toxicology of the herbicide, *Roundup*, by oral and pulmonary routes of exposure. Thirty-Third Annual Meeting of the Western Pharmacology Society, Banff, Alberta, Canada, February 1990.

Katsiyiannis WT, Long CL and Martinez TT. Cardiotonic steroids extracted from rabbit uterine tissue and amniotic fluid. Thirty-Second Annual Meeting of the Western Pharmacology Society, Breckenridge, Colorado, January 1989.

Williamson LM and Martinez TT. Toxic effect of different viscosity hydrocarbons in the lung. Thirty-Second Annual Meeting of the Western Pharmacology Society, Breckenridge, Colorado, January 1989.

Barker E and Martinez TT. Comparison of the effect of common decongestant agents and amphetamine on fighting behavior and weight change. Thirty-First Annual Meeting of the Western Pharmacology Society, Tucson, Arizona, January 1988.

Oster L and Martinez TT. The effect of tetrahydropapaveroline and naltrexone on voluntary ethanol ingestion in rats. Thirty-First Annual Meeting of the Western Pharmacology Society, Tucson, Arizona, January 1988.

Jessen TG and Martinez TT. The effect of phenylpropanolamine and amphetamine on fighting behavior and weight change in mice. Thirtieth Annual Meeting of the Western Pharmacology Society, Molokai, Hawaii, January 1987.

Xander JG and Martinez TT. A comparison of the effect of cholera toxin and norepinephrine on contractile and cyclic nucleotide response in the heart. Thirtieth Annual Meeting of the Western Pharmacology Society, Molokai, Hawaii, January 1987.

Martinez TT, Jerome M, Jaeger R and Barry R. The removal of cactus spines from the skin: A comparative evaluation of several methods. Twenty-First Annual American Society of Hospital Pharmacy Midyear Clinical Meeting, Las Vegas, Nevada, December 1986.

Martinez TT. The effects of cholera toxin in cultured cardiac myocytes. Twenty-Ninth Annual Meeting of the Western Pharmacology Society, Banff, Alberta, Canada, February 1986.

Martinez TT, Jaeger RW, deCastro FJ, Thompson MW and Hamilton MF. A comparison of the absorption and metabolism of isopropyl alcohol by oral, dermal, and inhalation routes. Veterinary and Human Toxicology 27, #4:123A 1985.

Martinez TT and Evans DE. The effects of the local anesthetic lidocaine and arterial air embolism on cerebral circulation. Twenty-Eighth Annual Meeting of the Western Pharmacology Society, Tahoe City, California, January 1985.

Driskell DK, Martinez TT and Crampton JM. A comparison of the effects of antiarrhythmic drugs on arrhythmias produced by left coronary artery ligation in rat.

Twenty-Eighth Annual Meeting of the Western Pharmacology Society, Tahoe City, California, January 1985.

Martinez TT and Crampton JM. Prostaglandins have both antiarrhythmic and arrhythmogenic activity against early ischemic arrhythmias in rat. The Pharmacologist, 22, 1980.

Martinez TT and Crampton JM. Comparison of the activity of several prostaglandins against arrhythmias induced by coronary ligation in rat. Clin. Res., 28, 1980.

Martinez TT. The triphasic cardiac inotropic response of norepinephrine at 28 degrees C. Twenty Third Annual Meeting of the Western Pharmacology Society, Vancouver, British Columbia, Canada, January 1980.

Crampton JM and Martinez TT. The effect of prostaglandin F2 beta, quinidine, disopyramide, and propranolol on arrhythmias induced by coronary ligation in rat. Twenty Second Annual Meeting of the Western Pharmacology Society, Colorado Springs, Colorado, January 1979.

Klemmer DW and Martinez TT. The effect of isoproterenol on cyclic AMP and increases in contractile force in paced rat left atria. Clin. Res., Southern Regional Meeting, January 1979.

Martinez TT and Crampton JM. The effect of post ligation infusion of prostaglandin E2 on arrhythmias produced by coronary artery ligation in rat. The Pharmacologist, 20, 1978.

Maslakowski CJ and Martinez TT. The effects of catecholamines on cyclic AMP at 37 and 28 degrees C. The Pharmacologist, 20, 1978.

Martinez TT and Walker MJA. The effects of lidocaine, quinidine, and prostaglandins on abnormal beating induced in cultured heart cells. The Pharmacologist, 19, 1977.

Martinez TT and Walker MJA. The actions of ouabain, dinitrophenol, anoxia, and ionic manipulation on cultured heart cell beating activity, Twentieth Annual Meeting of the Western Pharmacology Society, Victoria, British Columbia, Canada. January 1977.

Harvie CJ, Martinez TT and Walker MJA. The effect of a jellyfish (*Cyanea capillata*) cardiotoxin, Ca, and K on contractile activity of cultured heart cells. Canada Physiology, 8:#1, 1977.

Martinez TT and Walker MJA. The effect of a series of prostaglandins on cultured neonatal rat heart cell contractile activity. Canadian Heart Foundation Meeting, Edmonton, Alberta, Canada, October 1976.

McNeill JH and Martinez TT. Theophylline effects on amine induced cardiac contractile force and cyclic AMP. The Pharmacologist, 18, #2:400A, 1976.

McNeill JH, Martinez TT and Verma SC. The phenylephrine story. Nineteenth Annual Meeting of the Western Pharmacology Society, January 1976.

Martinez TT and McNeill JH. Comparison of changes in contractility and cyclic AMP in both paced and spontaneously beating rat atria in response to norepinephrine and phenylephrine. The Pharmacologist, 17, #2:113A, 1975.

Martinez TT and McNeill JH. Increases in contractility and cyclic AMP in paced rat left atria in response to norepinephrine and phenylephrine. Proc. Can. Fed. Biol. Soc. 18:295A, 1975.

Martinez TT and McNeill JH. Adrenergic amine-induced increases in contractility and cyclic AMP in paced rat left atria. Clin. Res., 22:596A, 1974.

Grants Received

The effect of catecholamines on cardiac contractility at reduced temperature. Biomedical Research Grant.

The antiarrhythmic actions of prostaglandins. Wander Foundation.

The antiarrhythmic actions of prostaglandins. Nebraska Heart Association.

The correlation of contractile force, cyclic AMP, and calcium flux in cardiac tissue. The Pharmaceutical Manufacturer's Association Foundation.

The effect of concanavalin-A on the number and responsiveness of Beta-2 adrenergic receptors. National Institute of Health, co-investigator with Dr. Robert Townley.

Investigations into the mechanism of action of cholera toxin. Biomedical Research Grant.

Comparison of the toxicology of glyphosate and the surface active agent, polyoxyethyleneamine, by oral and pulmonary routes of exposure.

Investigation of dopaminergic control in voluntary ethanol ingestion.

Investigation of steroid cardiotonic structure activity relationships.

Investigation of the postmortem redistribution of opiates.

Pharmacologic methods of relieving erythromycin induced dynamic ileus.

Teratogenic effects of tricyclic antidepressants.

Invited Lectures and Presentations

Welding Rods Conference, HarrisMartin Publishing, San Francisco, California, June 16, 2004.

Introduction to Toxicology: An Approach to Drug Development. Toxicology Network Seminar, Monsanto Corporation, St. Louis, Missouri, March, 2001.

Strategies in Handling DWI Cases: Interpretation of Scientific Tests, Lorman Education Services, St. Louis, Missouri, January 10, 2001

Direct versus Systemic Pulmonary Toxicology of *Roundup* and its Components, Medical Toxicology and Occupational Medicine Departments, Monsanto Corporation, St. Louis, MO, December 1990.

Clinically Important Drug Interactions, Family Medicine Royal Rounds, Deaconess Hospital, St. Louis, Missouri, March 1990.

Drug-Food Interactions. Given in cooperation with Southeast Missouri State University, Cape Girardeau, Missouri, December 1989.

Urine Screening for Drugs of Abuse. Given in cooperation with the St. Louis College of Pharmacy for the Missouri State Pharmacy Inspectors, St. Louis, Missouri, October 1989.

Adverse Effects of OTC Diet Medications Containing Phenylpropanolamine, *Today Show*, broadcast nationally, March 8, 1989.

Toxicology Update, Family Medicine Royal Rounds, Deaconess Hospital, St. Louis, Missouri, February, 1989.

Drug Problems in the Elderly. Given in cooperation with Southeast Missouri State University, Cape Girardeau, Missouri, December 1988.

Drug Abuse and Human Behavior. Given in cooperation with St. Louis College of Pharmacy, St. Louis, Missouri, February-March 1985.

Reyes Syndrome. An RX SAT Videotape presentation broadcast nationally, 1984.

Poisoning and Drug Overdose. Given in cooperation with the University of Missouri, St. Louis, School of Nursing, St. Louis, Missouri, September-December 1984.

Emergency Management of Poisoning. Given in cooperation with St. Louis College of Pharmacy for the Missouri State Association of Licensed Practical Nurses, August 1983.

New Drugs for the Central Nervous System. Given in cooperation with St. Louis College of Pharmacy, St. Louis, Missouri, February, 1983.

Drug Treatment of Epilepsy. Given in cooperation with Creighton University. November, 1978, Omaha, Nebraska.

Drug Treatment of Selected Nervous Disorders. Given in cooperation with Drake University, October, 1978, Des Moines; October, 1978, Atlantic, Iowa.

Editorial Responsibilities, Professional Recognition, and Service

Reviewer for Proceedings of the Western Pharmacology Society. 2002-2003

Reviewer for the *Western Medical Journal*. 1988-1989

Reviewer for the *Journal of Life Sciences*. 1984

Member of the Human Studies Committee, Barnes Hospital, St. Louis, Missouri. 1982-1985

Founding Member of the St. Louis College of Pharmacy Institutional Review Board. 1995-2000

Faculty Advisor for the Kappa Psi professional fraternity, Gamma Pi Chapter, 1984 - 1999.

Faculty supervisor for the St. Louis College of Pharmacy Drug Abuse and Poison Control Speaking Program for Community Schools, 1982 - 2003

Question writer for the National Association of Boards of Pharmacy Licensure Examination, 1980.

Delegate to the 5th District joint meeting of the American Association of Colleges of Pharmacy and Boards of Pharmacy, New Orleans, Louisiana, 1979.

Professional Organization Committees

Member of the Research Committee of the American Heart Association, Louisiana Affiliate. 1980, 1981.

President of the Ouachita Parish Chapter of the American Heart Association. 1981
Vice -President 1980)

Member of the Research Committee of the American Heart Association, Nebraska Affiliate, 1978, 1979.

Certification

Certification in Pharmacy

Pharmacy License

Illinois #051-290726, 2005 - present
Missouri #041174, 1982 - present
Rhode Island, #RPH 02793, 1981 - 1982
Louisiana, #11769, 1980 - 1981
Nebraska, #8929, 1977- 1979
British Columbia, #03087, 1975 - 1978
Indiana #26012392, 1969 - present

American Board of Toxicology 2004 - 2009

Fellow of the Academy of Toxicological Sciences - beginning March 31, 2005

Poison Specialist

American Association of
Poison Control Centers, 1988 - 1995

Membership in Scientific Societies and Professional Organizations

American Academy of Clinical Toxicology
American Association of University Professors
American College of Toxicology
American Society for Pharmacology and Experimental Therapeutics
American Society of Plant Biologists
Federation of American Societies for Experimental Biology
Society of Toxicology
Western Pharmacology Society
Rho Chi, Pharmacy Honor Society
Kappa Psi, Professional Pharmacy Fraternity

Scientific Awards, Citations, and Professional Honors

Emerson Electric. Excellence in Teaching Award. 1989 and 1990.

Alumni Chair Award for Excellence in Teaching. St. Louis College of Pharmacy. 1989.

Rho Chi, Pharmacy Honor Society, St. Louis College of Pharmacy Chapter. FoxMeyer Award for Excellence in Teaching. 1988.

Kappa Psi Professional Pharmacy Fraternity. *Gamma Pi* Chapter's Man of the Year. 1984.